



INFCC compensation
carbone

Carbon offsetting assessment as seen in France

2023 EDITION

ON 2022 DATA

What is the InfoCC platform?



Info Compensation Carbone is an online information platform all about voluntary carbon offsetting which is supported by the ADEME.

The objective of *Info Compensation Carbone* (InfoCC) is to inform and advise all potential users of carbon offsetting/contribution from a neutral standpoint. InfoCC helps disseminate best practices for both supply and demand and provides educational materials that anyone to access. As such, the platform promotes developing voluntary carbon dynamics in France in a more coherent and responsible manner.

www.info-compensation-carbone.com

 [@infos_cc](https://twitter.com/infos_cc)

 [Info Compensation Carbone](https://www.linkedin.com/company/info-compensation-carbone)

Info Compensation Carbone is an initiative led by Geres and supported by Ademe.



What is the current state of affairs?

As part of its work to provide clarity and transparency about voluntary carbon offsetting/contribution, InfoCC annually publishes an assessment of these activities in France. This publication aims to **provide quantitative and qualitative information about the state of the market** by listing and qualifying carbon credits developed in France or sold by French operators.

This new edition focuses on 2022. The data was collected from French operators of voluntary carbon offsetting/contribution, i.e. organisations (companies and associations) that sell carbon credits or equivalent products. They were consulted with qualitative interviews and a standardised survey. Their answers were collected between May and July 2023 and are kept anonymous in the interest of confidentiality.

N.B.: sales are given in either "credits" or "tonnes of CO₂ eq" for "equivalent in tonnes of CO₂", which is the benchmark value.

Thanks

We would like to thank the carbon offsetting operators who participated in the study. They are all visible in our online directory.

A special thank you goes to Fransylva for its collaboration in a survey dedicated to funding low-carbon certification forestry projects, the results of which have been included in our publication.

We would also like to thank Tara L'Horty and Philippe Delacote (Research Director - INRAE), from the *Chaire Économie du Climat de Dauphine* - PSL, for their interest in this work and advice that helps us continue improving this system.

Summary

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Overview

A continuously growing market

Once again this year, we are seeing continued development in the voluntary carbon offsetting/contribution market. The number of market stakeholders selling carbon credits increased in 2022 and the number of participants in our survey increased from 22 to 28.

Our study focuses on stakeholders in the French market but includes sales to international buyers. This allows us to present numerical data on a complete sample of the global market and extract more accurate data about France specifically. It is to clarify this bias that we have this year corrected the name of this publication to "Carbon offsetting assessment as seen in France".

Overall, the total credits we looked at in our study went up by 31% from 2022 to 2023 (from approximately 30 to 40 million tonnes of CO₂ eq). At a constant scope of respondents (i.e. only including the group of operators that answered the survey in both 2022 and 2023), the number of credits sold increased by 26%.

This evolution is even more significant with regard to the French Label bas-carbone certification "credits" which have increased by 230%. This sharp rise can be partially explained by the Climate and Resilience law which requires carbon from domestic flights to be compensated which helped stimulate demand for credits in France. This trend will probably continue, given the upsurge in the number of certified projects as observed by the Ministry of Ecological Transition.

Even if some communities and a few private citizens purchase credits, carbon finance is still a predominantly company-oriented mechanism – something which can be seen both due the number of clients (93% of the total in our scope) and the value (99%).

An average price per tonne of CO₂ eq on the rise

The average price of credits sold went up significantly between our two studies though remained in the same order of magnitude. In our sample, credits were sold at an average of €6.1/tCO₂ eq (compared to €4.6 in 2021). As in previous years, this amount hides significant disparities between sales prices which depend greatly on location, certification and the type of businesses.

For instance, the average sales price for the Label bas-carbone is €33/tCO₂ eq. This price helps ensure a better rate of financing for project leaders, despite quality expectations growing, but which is still a sales barrier for certain companies.

Towards the emergence of alternative certifications?

An overwhelming majority of credits sold within the scope of our study come from historical carbon finance standards (Verra, Gold Standard and to a lesser extent Clean Development Mechanism). However, nearly a third of stakeholders are starting to offer labels, certifications or other types of alternative guarantees to overcome certain perceived limitations of these standards. Here is a list of potential issues:

- Certain practices (especially innovative experiments or very local projects) do not use conventional standard methodologies.
- The cost of the international standards certification process is sometimes too high for project leaders, particularly those with lesser budgets, who then end up turning away from carbon finance.

Independent methodologies are being developed to quantify and value the impacts of projects for which existing standards are not always adapted. They are most of the time "verified" by a third-party research firm that does not make these units carbon credits, as defined by the International Carbon Reduction and Offsetting Accreditation (ICROA).

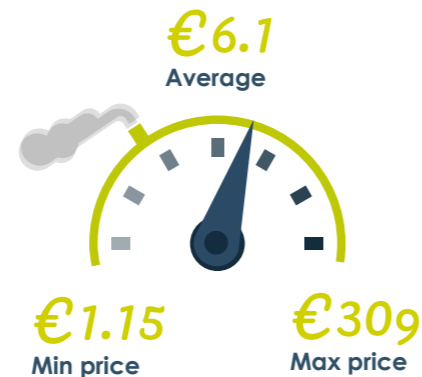
2022 balance sheet

All credits sold by the operators surveyed

40,314,903
tonnes of CO₂ eq sold worldwide*

a total of over
€245,000,000
purchased by
8,242 clients
sold by
28 different operators

Price of credits (in € / tonne CO₂ eq)



Carbon offsetting in France

French buyers

7,722,000 tonnes of CO₂ eq sold to French buyers (i.e. just under 20% of the credits covered by the study), to more than 900 different clients.

French projects

A total of **624,000** credits sold come from projects in France (i.e. 2% of the credits covered by the study). **567,000** tonnes sold or pre-sold as part of the Label bas-carbone at an average price of **€33**.



Renewable energy projects and forestry projects still far ahead of other fields

Overall, **82%** of the credits sold come either from the field of renewable energies (55%, with large projects driving this growth), or forestry projects (27%). Last year, these two sectors represented a larger share of the market volume (88%).

	Number of tonnes CO ₂ eq sold	Average price
Renewable energies	22,177,553	€3.90
Reforestation, afforestation, forest protection	10,896,793	€8.50
Domestic equipment	4,248,749	€8.90
Other	2,991,808	€16.50

The dominance of historical standards waning on the market

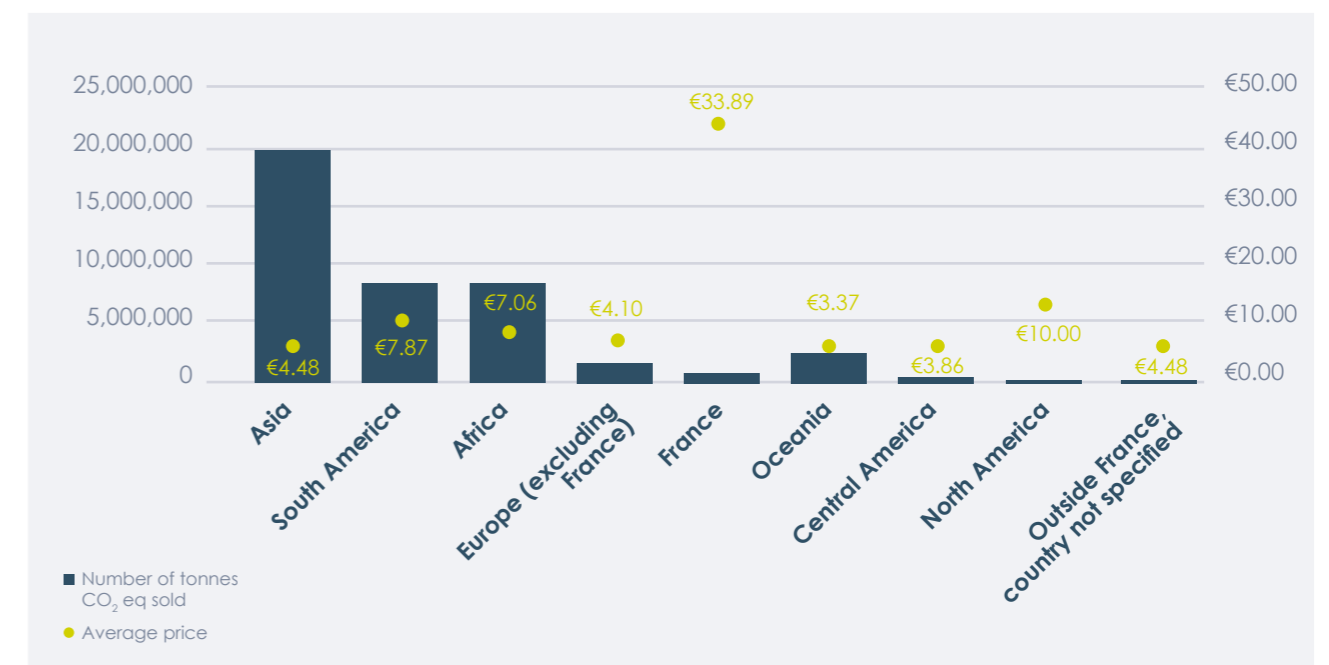
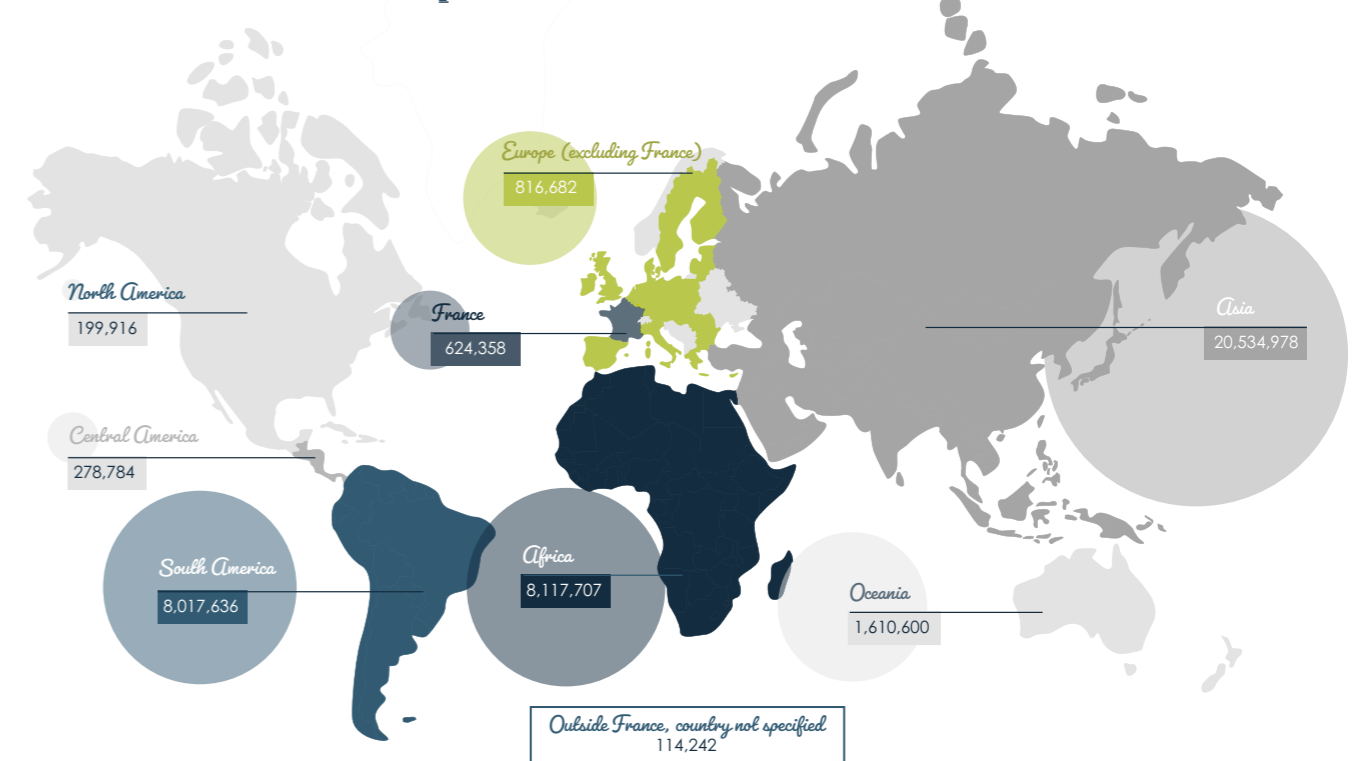
54% of the credits sold come from projects certified by one of the three certifications Gold Standard, Verified Carbon Standard or Clean Development Mechanism. The end of the CDM or the rise of self-certifications are likely to be some of the reasons for this.

	Number of tonnes CO ₂ eq	Average price
VERRA	14,591,727	€5.85
Gold Standard	6,598,454	€6.74
CDM	716,502	€4.62



Analysis of credits sold in 2022 By project location

Number of credits sold (tCO₂)

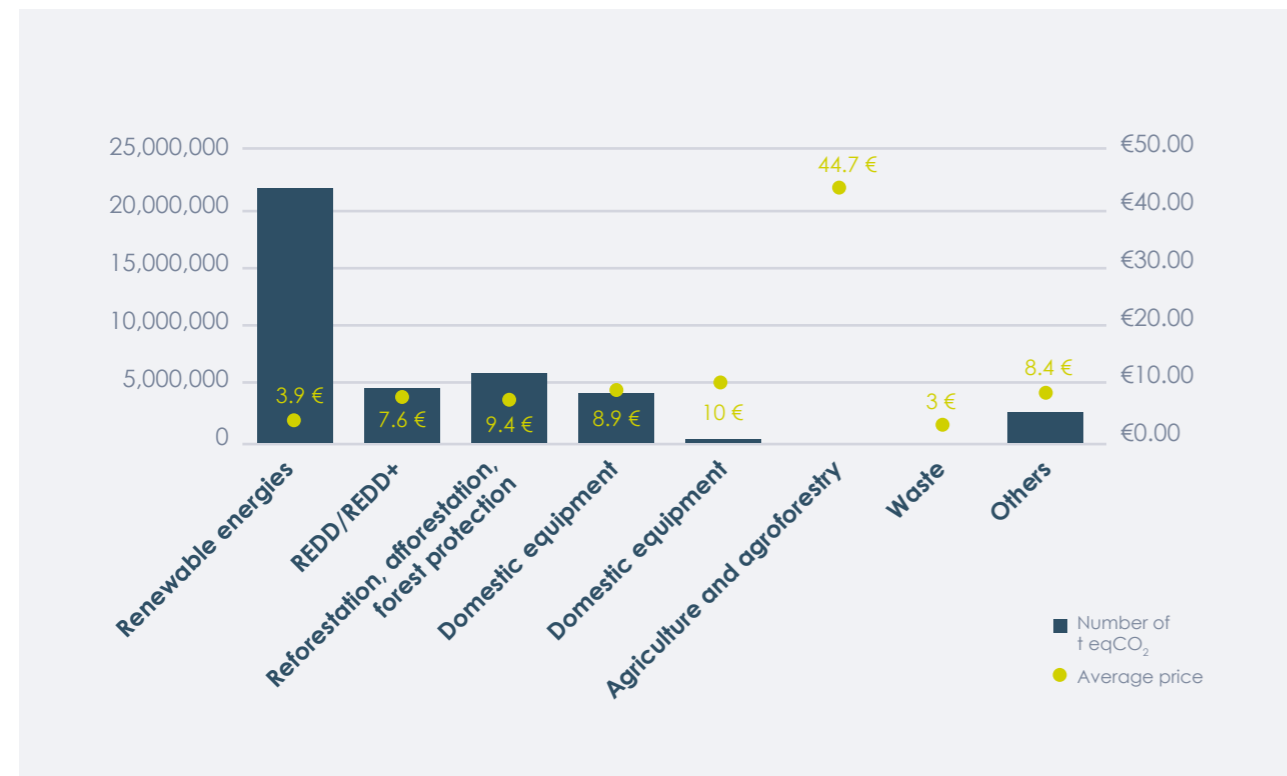
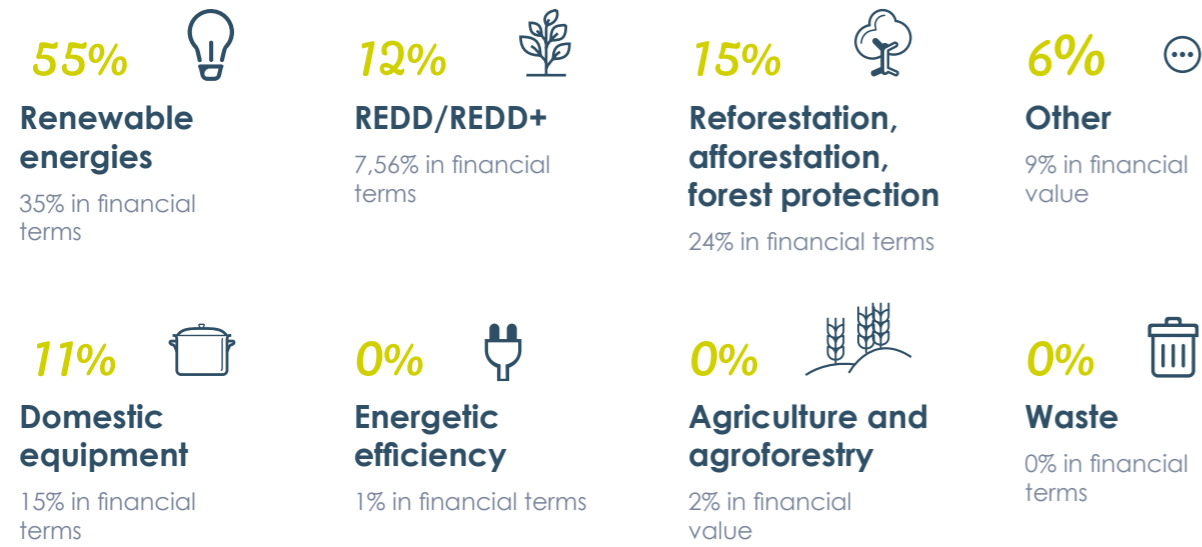


This graph should be read with caution, particularly with regard to credits from other regions in the "North". The values given do not mean that there are no credits at prices equivalent to those produced in France – but they are probably sold "on site" and not exported.

Analysis of credits sold in 2022

By type of project

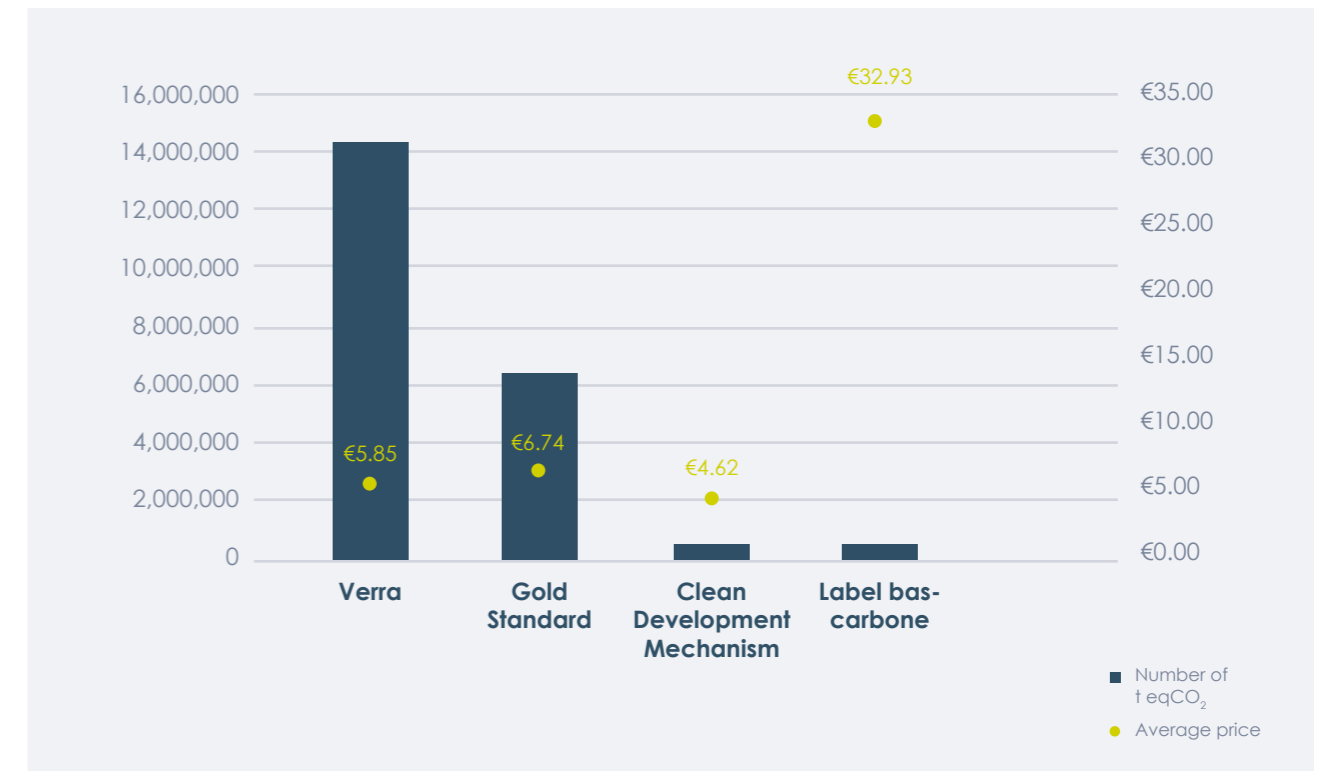
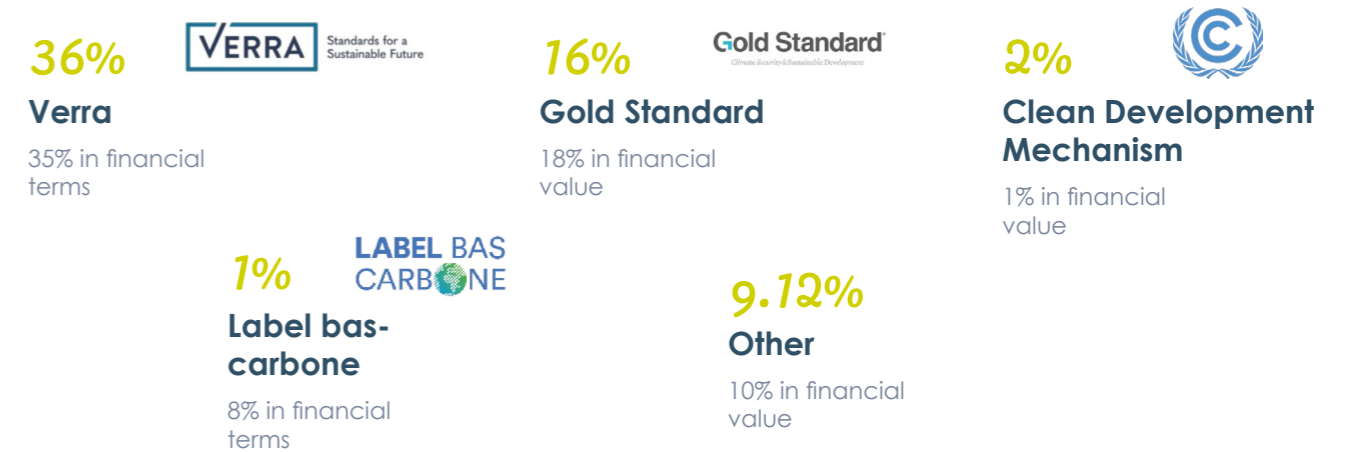
Number of credits sold (tCO₂e), % of total



Analysis of credits sold in 2022

By type of certification

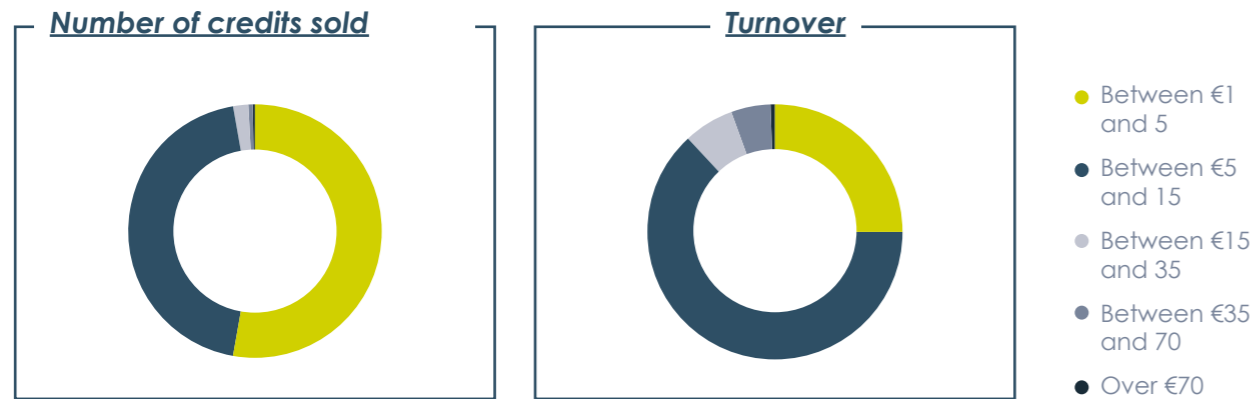
This year, given that almost a third of operators say they offer in-house certification or are currently developing it, we have decided to create a new category that accounts for in-house certification credits. This category currently represents only 0.12% of credits sold (1% in financial terms) and is therefore not represented in the graph below. The «Other» category (distinct from the previous one) includes the rest of the credits that are declared as being certified (without necessarily specifying which certification). Finally, it should be noted that for 35% of the credits, we do not have any information about the project certification.



For information about the Label bas-carbone and the various international standards, please visit the Info Compensation Carbone platform.

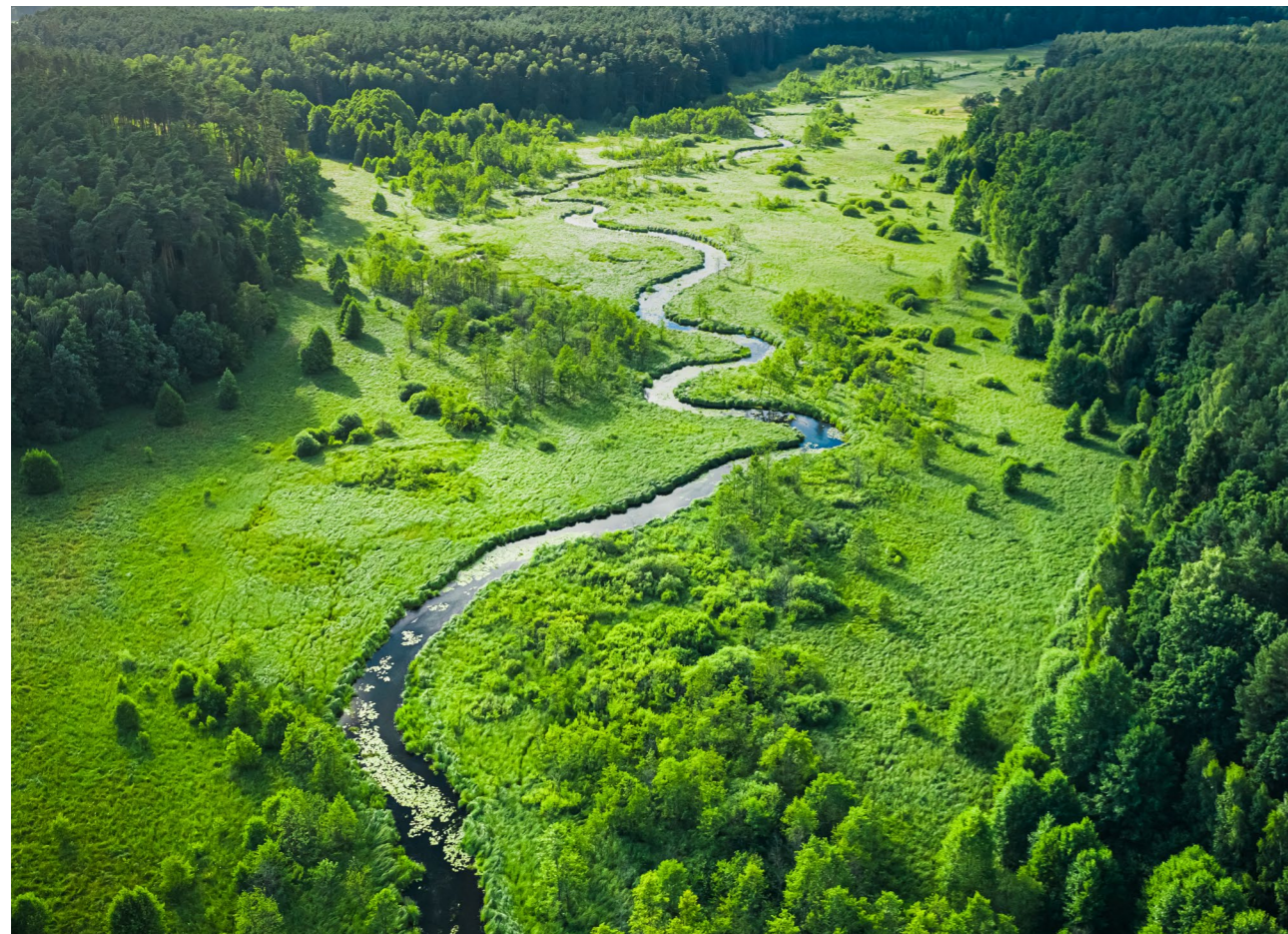
Analysis of credits sold in 2022

By price/tonnes of CO₂ eq



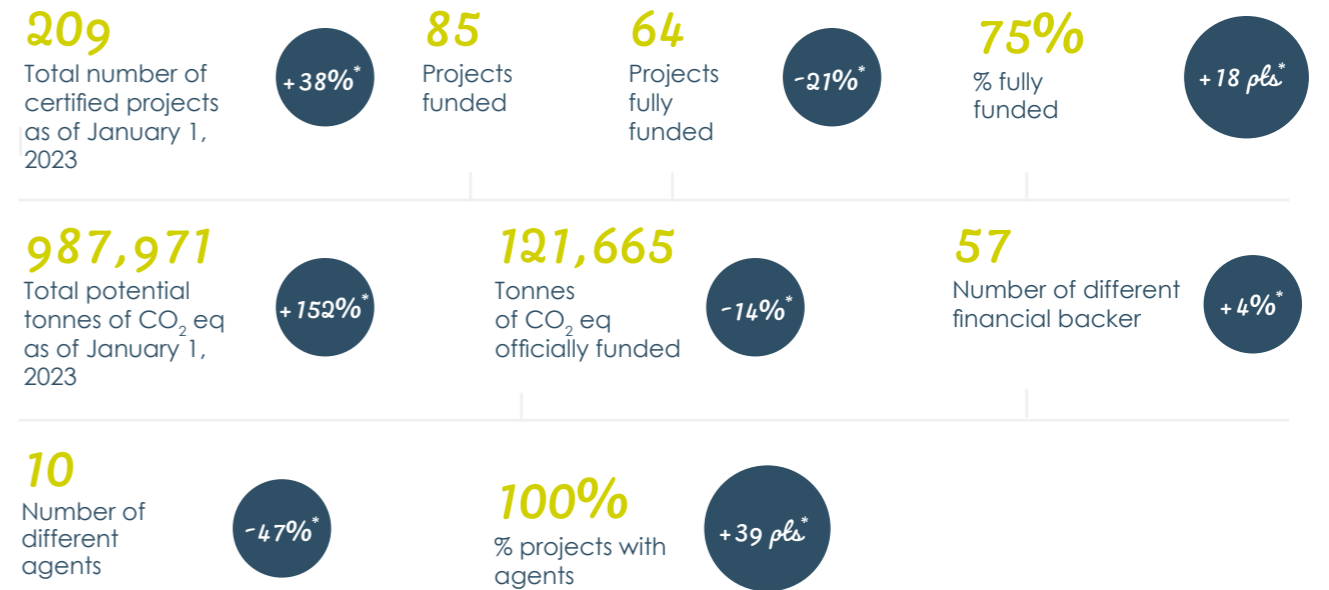
A breakdown of the number of credits sold at different prices shows us the significant volume of credits whose tonne of CO₂ eq can be considered "cheap", seeing as over half of the 40 million credits in our survey are sold for less than €5, **the median is €4.4/tCO₂ eq**. Credits sold for €15 or more only represent 2.5% of the total volume (but 11.5% in value).

For information about the Label bas-carbone and the various international standards, please visit the [Info Compensation Carbone platform](#).

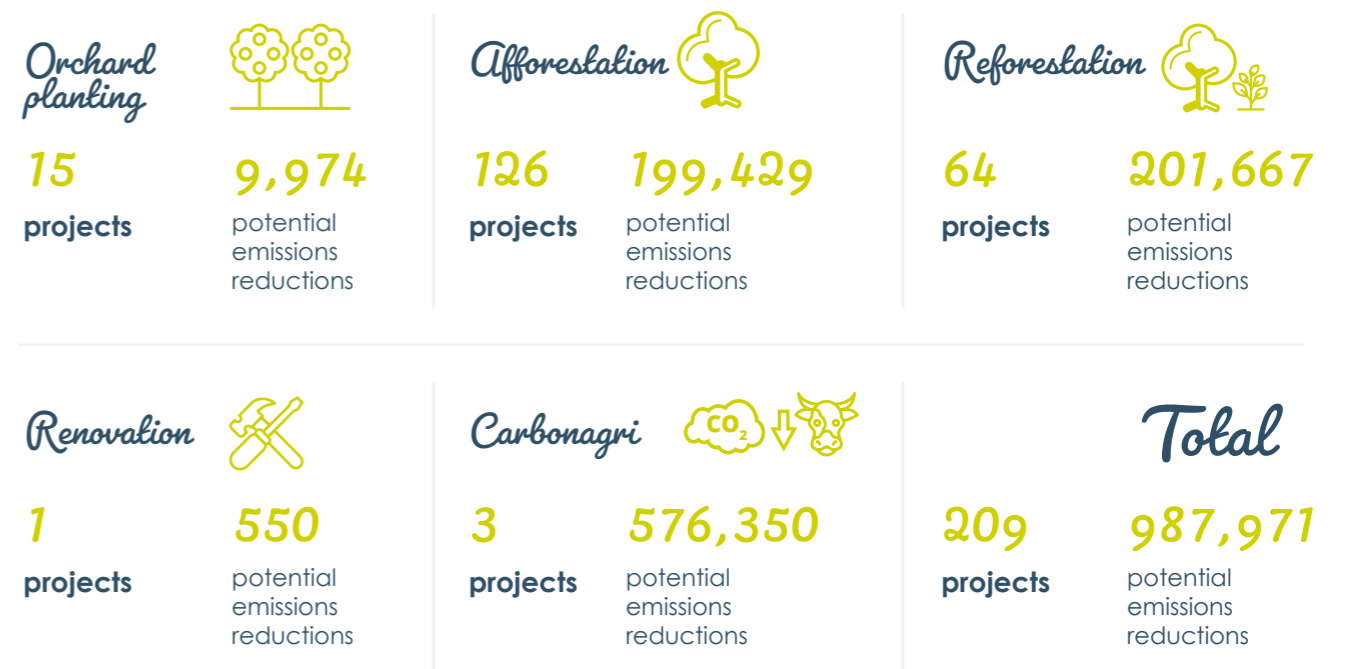


Focus on the French Label bas-carbone certification

Key figures



Breakdown of all certified projects in 2023 by methodology



Data taken from the table "List of certified projects and their funding status" as of January 1, 2023. N.B., the data in this table cannot be directly compared to the operators' declarations, because they include in their figures pre-sales of emission reductions from projects currently being certified.

Methods

13 approved methods:

3 forestry methods:

Afforestation, Reconstruction of degraded forest stands, Balivage (conversion of good thickets into high forests on stumps)

6 agricultural methods:

Carbon Agri (mixed crop-cattle breeding), Hedges (sustainable management including hedge planting), Orchard planting, Field crops, Input management, Improvement of cattle feed

2 building methods:

Retrofitting buildings (with reused or low-carbon materials), New Bio-sourced Buildings (construction projects for new buildings containing bio-sourced products in significant quantities)

1 transport method:

Third places (reduced commuting for remote employees living in sparsely populated areas)

1 marine method:

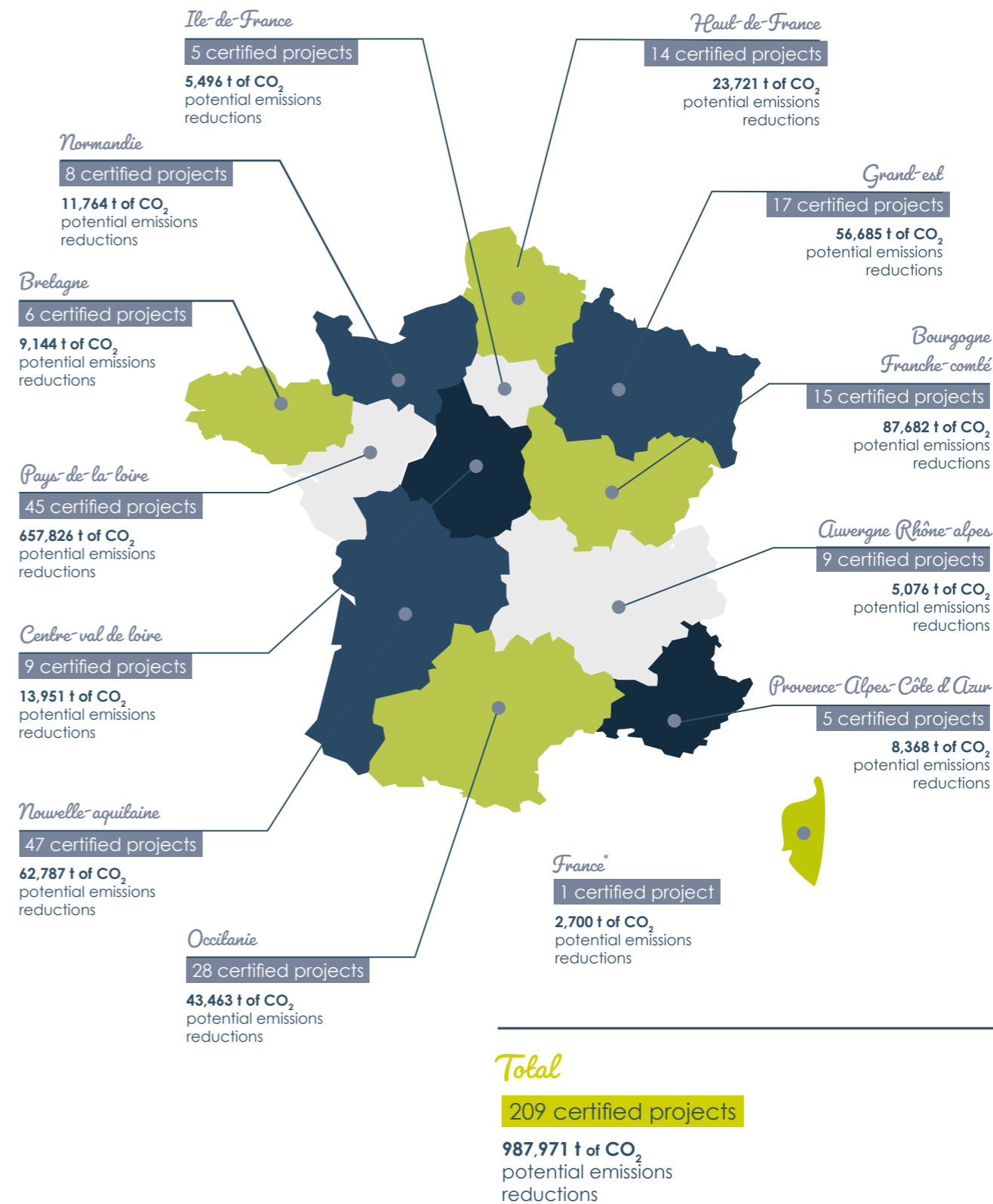
"Posidonia herbaria" (using carbon storage sequestered within Posidonia meadows being damaged from anchoring on the Mediterranean coast)

LABEL BAS CARBONE

Other methods planned:

- Improvement of populations in forestry deadlocks
- Urban tree planting
- Preserving old forests/areas affected by senescence - Restoring degraded farmland in French Guiana
- Continuous cover/irregular forestry/ extending production cycles
- Mangroves
- Methodology to conserve and restore eelgrass beds
- Restoring grasslands/open spaces
- Restoring peat bogs
- Agroforestry (hedgerows between plots of land)
- Biogenic CO₂ capture
- Perfume plants
- Production of algae to replace ammonite fertilisers and produce bioplastics
- Sustainable mobility plans
- Replacing combustion-powered vehicles with delivery tricycles or cargo bikes
- Making heavy goods vehicles more ecological
- Reconditioning electronic equipment

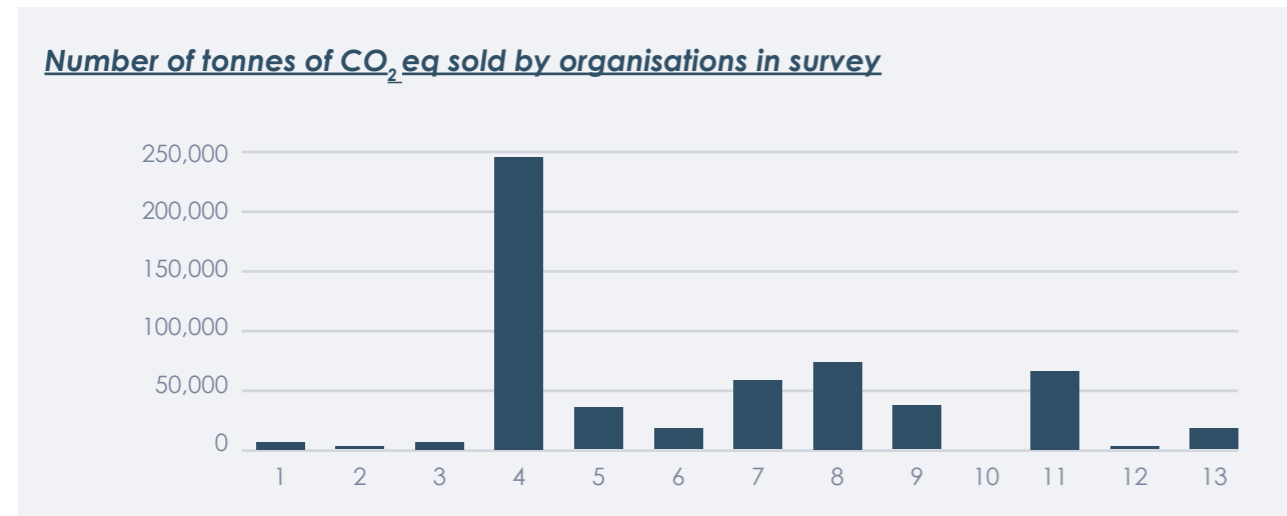
Geographic distribution of certified projects in 2023



*CarbonAgri projects in particular can cover several regions.

Focus on the price of forest carbon as part of the low-carbon certification¹

12 out of the 13 organisations in this specific survey released their sales figures in 2022. This came to a total of 538,808 tonnes of CO₂ eq sold. Along with the Label bas-carbone, two stakeholders have declared projects with their own certification and/or without certification.



As one sole respondent accounts for almost half of the sales, we need to be careful in how we generalise any of the data calculated below. As such, the minimum and maximum prices given below can be quite misleading, with the median value being only €23.6/tCO₂ eq.

Price (including VAT) per tonne of carbon in €:

Once again this year, none of the respondent organisations reported any project to balivate coppices into high forest on stumps and so the prices are only based on afforestation or reforestation projects.



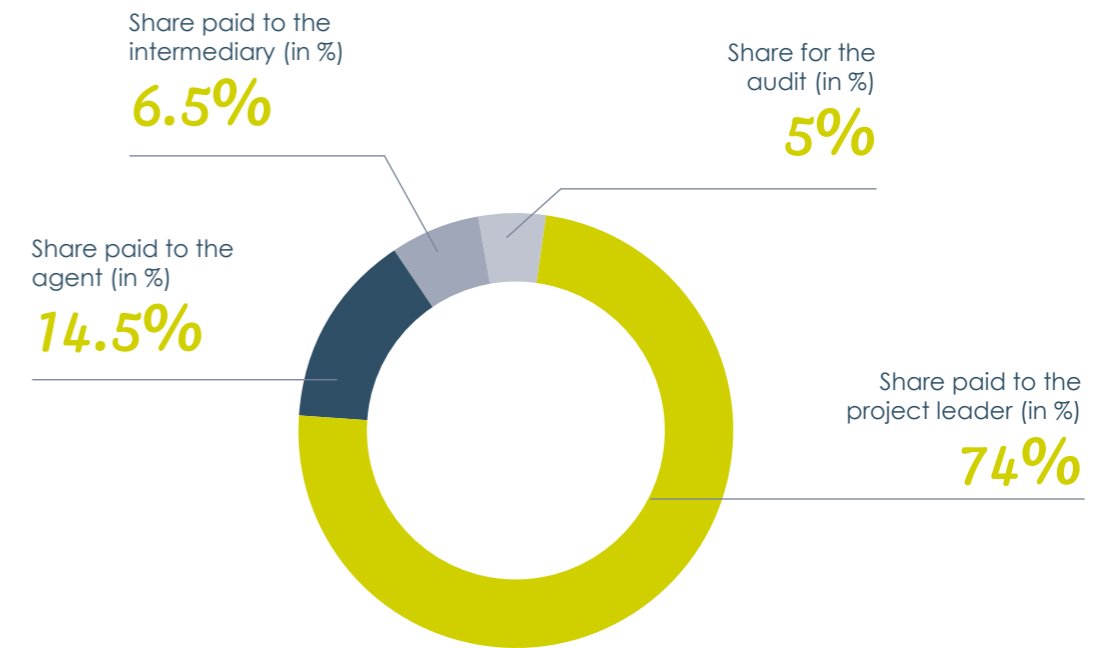
These data are compiled from the values provided by the respondents, in reality the price per tonnes of CO₂ eq is highly variable depending on the project (surface area, environmental co-benefits, project cost, etc.). These figures should be considered as estimates – especially since due to the lack of information, data from elsewhere in the survey were used to complete the figures. Compared to 2021, there is a drop in the

weighted average price of the CO₂ eq tonne, a more significant finding for the reforestation method.

Finally, we can compare the weighted averages calculated here to the average price per tonne of all forestry credits from France-based projects, which comes to €48.30.

Project financing features:

The survey helps us estimate the average share for each stakeholder in a forestry project. The share paid to the project leader can rise significantly above the average: up to 85% for certain projects.



Compared to the 2022 forestry focus, we see that the average rate of funding forestry projects has gone up by 2 points.

What is the average rate for funding forestry works (%)?
65%

If the projects are pre-funded before the works, what is the average rate (%)?
47%

The survey also sheds light on the upper and lower levels (volume too low, price too high) to be able to reasonably access the market. For the minimum volume, the average comes from only 5 responses (which are all fairly similar).

Volume below which it is difficult to sell forestry project credits? (tonnes CO₂ eq)
359

Price it is difficult to sell forestry project credits at? (€/tCO₂ eq)
48

¹ Consultation carried out simultaneously with the InfoCC survey of organisations identified by Fransylva as potential LBC forest sellers (N.B. only a small fraction of stakeholders listed a small minority of non-LBC projects).

*Excluding the Low-Carbon certification, two operators have reported on projects in "conservation of carbon sinks" and "conservation of sensitive ecosystems".

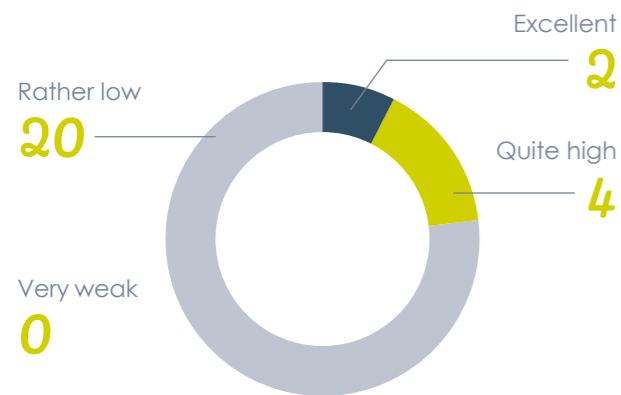
Carbon offsetting market analysis

This part provides a restitution of the operators' responses to the qualitative questions asked of them during this survey².

State of the voluntary carbon market

Image and level of confidence in the market

In your opinion, what level of confidence does the Voluntary Carbon Market (VCM) currently have?



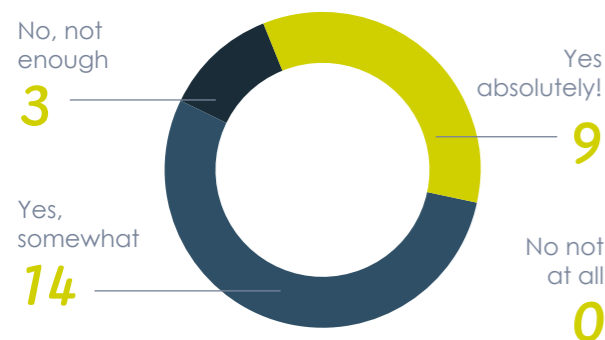
A large majority of operators consider that the voluntary carbon market has a rather low level of confidence, particularly due to recent scandals such as "ghost" credits as the Guardian revealed in January 2023. The criterion of additionality is regularly questioned for certain activities that cost a lot less than they did several years ago.

The image of a voluntary market can also be penalised by some financial backers' practices as they can lack transparency and even sincerity regarding their overall carbon approach. Typically, when they do not have a real reduction strategy and continue to claim carbon neutrality after buying credits, for instance.

However, all these difficulties have encouraged the stakeholders and the various standards to raise their level of requirements and verification.

Effectiveness of MVC in climate action

Do you yourself think that the VMC effectively contributes to the fight against climate change?



Stakeholders interviewed about the voluntary carbon market's ability to be part of the fight against climate change mainly answered that it does participate, even despite the abuses and scandals mentioned above. The distinction between contribution and compensation is increasingly seen as useful in limiting the misuse of displaying reduction efforts and commitments on the same level, and contribution to third-party projects, especially by purchasing carbon credits. 85% of operators who expressed their opinion are leaning more towards gradually starting to use the word "contribution" instead of "offsetting".

However, several stakeholders are reminded that the priority must be to change practices and not simply semantics. Some respondents also consider that we should move to certification of operators rather than credits, the current mechanism being seen as an obstacle to the massification of projects.

² 27 of the 28 structures surveyed answered the following questions concerning the carbon offset market and the needs of their partners (project leaders and financial backers).

Differing definitions between offsetting and contribution, according to the Net Zero Initiative*:

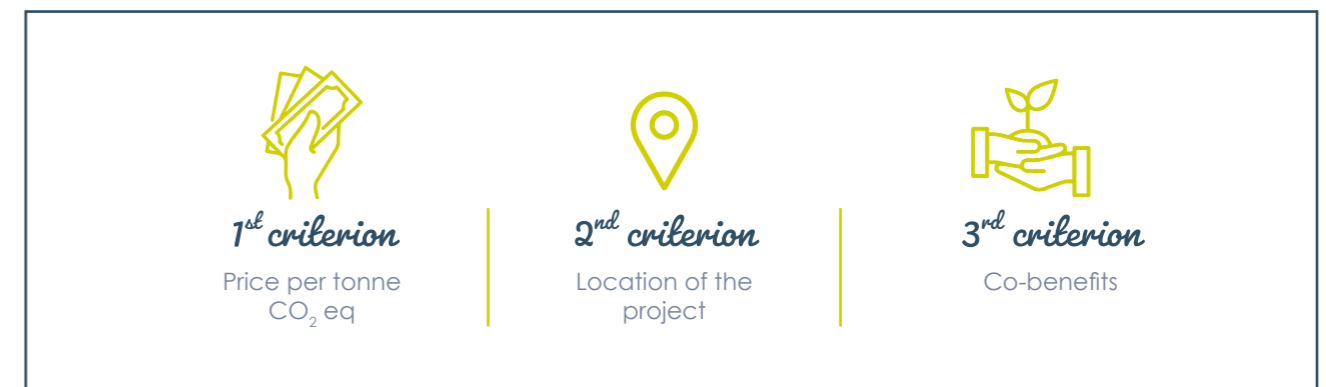
- Carbon offsetting is the generic term that has been historically used to refer to the three theoretical stages of carbon action: «Measure, Reduce, Offset». But the physically questionable dimension of the concept and the psychological bias it induces in buyers (believing in being able to «cancel out» the climate problem at little cost, etc.) have led to questions about the appropriate vocabulary used to describe this mechanism.
- Carbon contribution refers to funding low-carbon projects outside a company's value chain. It is considered to be useful for society as a whole because it contributes to financing mitigation and the preservation or development of carbon sinks, for projects that would not necessarily be able to develop without external aid.

Valuation of carbon credits

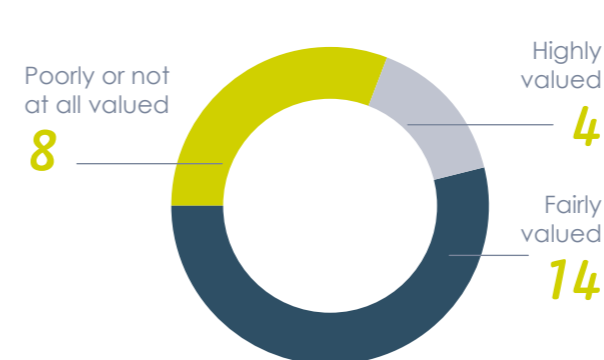
Buyer decision criteria

Among 8 criteria submitted (Price per ton, co-benefits, certification, age and nature of the project, location of the project, transparency in the monitoring of credits, transparency in the use of income), here are the three which emerge as being the most decisive in the eyes of the 26 operators who answered this question:

For most operators, the determining element for financial backers in the choice of credits remains the price per tonne, just ahead of the location of the project. But the co-benefits, which are in 3rd position, appear to be an increasingly important determinant, sometimes a required condition for purchasing credits.



Taking into account the co-benefits of projects

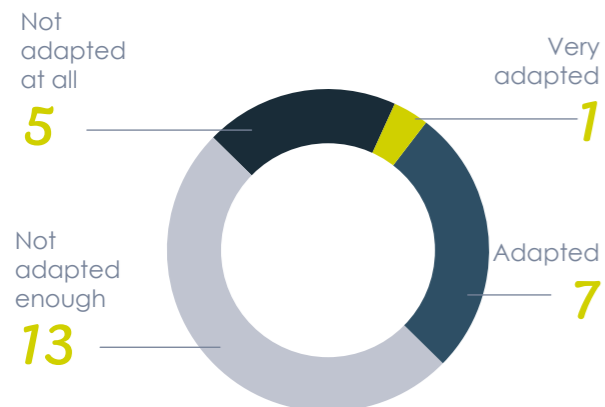


Consistent with the previous question, more respondents consider that co-benefits are fairly or more highly valued compared than last year. However, the comments highlight the fact that, although providing one or more co-benefits seems to be increasingly important given the marketing dynamic, this often only has a marginal effect on the price of the credit being sold. The most important aspect is the location of the initiative, and the ability to demonstrate that carbon has been mitigated or sequestered, which still remain the essential elements in determining how useful a project is.

*Taken from Net Zero Initiative - Un référentiel pour une neutralité carbone collective, Carbone 4, April 2020

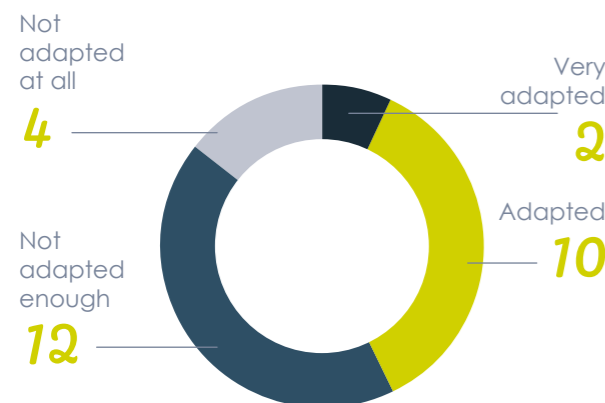
Label bas-carbone

The Label bas-carbone for project leaders



The Label bas-carbone certification is generally considered to be adapted in scientific and operational terms, to the projects, although it often requires support from the backers. However, there are some reservations about its large-scale deployment, such as: availability; certification, the period after which emission reductions (ERs) can be counted (5 years), the absence of methods for several types of activities - although it must be emphasised that 12 new methods are being developed. The lack of training and availability of local education authorities is also mentioned as a recurring obstacle in the field.

The Label bas-carbone for financial backers



For a significant proportion of financial backers, the Label bas-carbone raises reservations at this stage. Among these, the ban on using the secondary market is seen by several stakeholders as an obstacle to pooling and therefore to the rise of the mechanism. In addition, the fact that these are not strictly speaking "carbon credits" (with the transferable ownership system associated with them), is also considered by several stakeholders as limiting the fluidity of the market. Finally, some mention the audit principles adopted, which would postpone the effective control of project results too far in time, which operators may struggle to justify to buyers.

Despite these constraints, certification really does seem to meet market expectations, since the supply is deemed to be too limited in relation to the strong demand from funders. Some also point out that these demanding conditions also ensure that this certification is rigorous.

However, one positive point that came out is that the certification helps eligible projects get significant remuneration.

Project timelines

Excluding the Label bas-carbone, it takes on average **15 months** between submitting a project and the first credits it generates. This figure nevertheless conceals large disparities between very rapid processes, particularly with regard to internal certification, and others extending over several years. These durations are often seen as too long, the reasons given including the lack of independent auditors and human resources in general.

Participating structures

For more details about French carbon offsetting operators (offers, areas covered and type of projects supported), go to our [online directory](#).

Do you sell carbon credits and would like to participate in our next report? Email us at contact@info-cc.com

Conclusion

The need to carry out an analysis of voluntary carbon offsetting in France stemmed from countless discussions with companies and project developers who had no real visibility on the state of the market.

It is sometimes difficult to navigate through the carbon offsetting/contribution ecosystem, with so many operators, certifications and different types of projects. For more information about how this market works, and about the various regulatory frameworks and carbon finance mechanisms, you can visit our platform : [Info Compensation Carbone](#).

N.B.! This study is not intended to be comprehensive in terms of the number of credits bought and sold in 2022. The aim is rather to analyse the main characteristics of the credits sold (nature of the project, location, certification, price, etc.) and identify trends that market stakeholders will find useful. However, this questionnaire remains declarative and none of the data that the stakeholders were kind enough to provided voluntarily has been thoroughly audited. Although precautions have been taken to avoid counting data twice, there is still a risk as some contributions were incomplete.

This exercise is repeated and completed every year to keep abreast of changes in the market and practices. It also enables the *Info Compensation Carbone* platform to adapt its content and responses to the needs of the carbon finance ecosystem.

Depending on emerging trends or new types of stakeholders that may be studied (alternative financing methods, local initiatives, etc.), the survey may be revised at a later date or have its scope evolve - while preserving the comparability of results from one year to the next as far as possible.

Annexes

Raw data

Credit sales by geographical area

	Number of tonnes CO ₂ eq	%	Total value	%	Average price	min price	max price
Renewable energies	22 177 553	55%	85 461 868	35%	€3.85	€1.56	€50
REDD/REDD+	4 707 750	12%	35 588 668	14%	€7.56	€2.62	€16
Reforestation, afforestation, forest protection	6 189 043	15%	58 347 029	24%	€9.43	€1.15	€309.6
Domestic equipment	4248 749	11%	37 644 070	15%	€8.86	€3.53	€25
Energetic efficiency	170 600	0%	1 707 250	1%	€10.01	€10	€15
Agriculture and agroforestry	113 773	0%	5 079 940	2%	€44.65	€5	€52
Waste	100 000	0%	300 000	0%	€3	€3	€3
Others	2 607 435	6%	21 760 254	9%	€8.35	€2.45	€16.2
Total	40 314 903	100%	245 889 080	100%	€6.1		

Credit sales by project type

	Number of tonnes CO ₂ eq	%	Total value	%	Average price	min price	max price
Asia	20 534 978	51%	91 915 881	37%	€4.48	€1.90	€44
South America	8 017 636	20%	63 111 652	26%	€7.87	€2.45	€44
Africa	8 117 707	20%	57 348 089	23%	€7.06	€1.15	€27
Europe (excluding France)	816 682	2%	3 347 239	1%	€4.1	€4.39	€68
France	624 358	2%	21 157 733	9%	€33.89	€5	€309.6
Oceania	1 610 600	4%	5 421 486	2%	€3.37	€39	€39
central America	278 784	1%	1 076 117	0%	€3.86	€2.7	€11.94
North America	199 916	0%	1 999 459	1%	€10	€10	€10.01
Outside France, country not specified	114 242	0%	511 423	0%	€4.48	€4.48	€4.48 *
Total	40 314 903	100%	245 889 080	100%	€6.1		

Credit sales by certification

	Number of tonnes CO ₂ eq	%	Total value	%	Average price	min price	max price
VERRA	14 591 727	36%	8 5326 581	35%	€5.85	€1.56	€50
Gold Standard	6 598 454	16%	44 453 392	18%	€6.74	€2.35	€65
Clean Development Mechanism	716 502	2%	3 306 794	1%	€4.62	€3	€48
Low Carbon certification	567 373	1%	18 682 336	8%	€32.93	€8.7	€309.6
Self-certification	49 432	0%	2 179 676	1%	€44.09	€10	€90
Other certifications	3 679 588	9%	21 599 462	9%	€5.87	€2.45	€45
Not specified	14 111 827	35%	70 340 839	29%	€4.98	€0.82	€0
Total	40 314 903	100%	245 889 080	100%	€6.1		



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